

WHAT IS CLAIMED IS:

1. A method for modeling an investment fund mix to produce a projected guaranteed accumulation investment amount for a user over a predetermined time period equal to at least a preselected guaranteed accumulated investment amount selected by the user comprising the steps of:
- designating funds for investment to produce the fund mix;
 - comparing a diversification guideline to the fund mix;
 - completing an information file for the user;
 - determining a pattern of investments to meet the preselected guaranteed amount;
 - applying the diversification guideline to the information file to determine whether the information file meets the guideline;
 - automatically calculating the projected guaranteed amount; and
 - comparing the projected guaranteed amount to the preselected guaranteed accumulated investment amount.
2. The method of claim 1 wherein the investment fund comprises select funds.
3. The method of claim 1 wherein the investment fund comprises variable annuities.
4. The method of claim 1 wherein the step of determining a pattern of investments to meet the preselected guaranteed amount further comprises the steps of:
- suggesting a pattern of investments;
 - automatically calculating a suggested pattern guaranteed amount;
 - comparing the suggested pattern guaranteed amount to the preselected guaranteed amount; and

if the suggested pattern guaranteed amount is not at least the preselected guaranteed amount, returning to the step of suggesting a pattern of investments.

5. The method of claim 1 wherein the step of applying the diversification guideline to the information file to determine whether the information file meets the guideline further includes the steps of, if the information file does not meet the diversification guideline:

5 automatically noting exceptions;
automatically suggesting alternative inputs to meet the guaranteed amount;
10 inputting corrections; and
automatically returning to the step of completing an information file for the user.

6. A method for identifying a fund mix producing a projected accumulation investment amount exceeding a preselected amount for a user comprising the steps of:

15 inputting a time period for producing the maximum accumulation investment amount;
inputting a probability of the projected accumulation investment amount exceeding the preselected amount;
20 automatically searching predetermined probability distributions for potential funds for the fund mix;
automatically listing a plurality of potential funds by projected accumulation investment amount produced using the predetermined probability distributions for
25 the potential funds;
comparing a diversification guideline to the plurality of potential funds; and
automatically combining a plurality of potential fund meeting the diversification guideline to produce an optimum fund mix that will produce a projected accumulation investment amount exceeding the preselected amount.

30

- 54 -

7. The method of claim 6 wherein the fund mix comprises select funds.

8. The method of claim 6 wherein the fund mix comprises variable annuities.

5

9. A method for projecting an accumulated investment amount for a portfolio having a plurality of funds over a preselected time period for a user, comprising the steps of:

10 inputting initial and periodic contributions and fund allocations for the plurality of funds;

completing a projection method parameters file in which various parameters are identified, including parameters set by the user based upon investment goals selected by the user; and

15 automatically performing a projection of the accumulated investment amount for the portfolio having the plurality of funds.

10. The method of claim 9 wherein the plurality of funds comprises select funds.

20 11. The method of claim 9 wherein the plurality of funds comprises variable annuities.

25 ~~12. The method of claim 9 further comprising the step of automatically calculating the time needed to process the projection of the accumulated investment amount for the portfolio having the plurality of funds.~~

30 13. The method of claim 9 further comprising the step of:
if the user interrupts the step of automatically performing a projection of the accumulation amount for the plurality of funds, automatically presenting completed projections.

14. The method of claim 9 further comprising the step of:
automatically prompting the user prior to performing the step of
automatically calculating a projection completion time.

5

15. The method of claim 9 wherein the step of automatically performing
a projection of the accumulation amount for the plurality of funds further
comprises the steps of:

10

inputting the average yield for each of the plurality of funds;
automatically deducting a service charge; and
automatically calculating the average projected yield for each of the
plurality of funds.

15

16. The method of claim 9 wherein the step of automatically performing
a projection of the accumulation amount for the plurality of funds further
comprises the steps of:

inputting data for the projection; and
automatically performing a distribution model.

20

17. The method of claim 9 wherein the step of automatically performing
a projection of the accumulation amount for the plurality of funds further
comprises the steps of:

25

inputting data for the projection;
setting a yield equal to the index performance for a predetermined number
of simulations; and
automatically performing a distribution model for the number of simulations
greater than the predetermined number.

18. The method of claim 9 wherein the step of automatically performing a projection of the accumulation amount for the plurality of funds further comprising the steps of:

- 5 inputting an average annual change in index performance for each index fund and a standard deviation for the average annual change in index performance;
 automatically performing a normal distribution random projection of annual index appreciation;
 automatically deducting a predetermined percentage of annual yield from the projection of annual index appreciation;
10 automatically performing a distribution model to generate multiple accumulation amounts.

19. The method of claim 9 wherein the step of automatically performing a projection of the accumulation amount for the plurality of funds further comprises the steps of:

- 15 a. inputting a number of scenarios and number of simulations;
 b. automatically generating a random number for a first simulation;
 c. inputting projection method factors;
 d. automatically generating a first simulation result for a random
20 distribution model;
 e. automatically generating a new random number from the first random number;
 f. automatically generating a new simulation result for the random distribution model;
25 g. automatically repeating steps e and f a number of times equal to the number of simulations inputted less two simulations;
 h. automatically inputting the output of step g as the average yield for each of a plurality of funds;
 i. automatically deducting a service charge; and

- 57 -

j. automatically calculating the average projected yield for each of the plurality of funds;

k. automatically generating a first simulation result for the random distribution model for a new simulation; and

5 l. automatically repeating steps e through j a number of times equal to the number of scenarios inputted less one scenario to produce outcomes for each of the plurality of scenarios.

10 20. The method of claim 16 wherein the step of automatically performing a distribution model further comprises the steps of:

- a. inputting a number of scenarios and number of simulations;
b. automatically generating a random number for a first simulation;
c. inputting projection method factors;
d. automatically generating a first simulation result for a random

15 distribution model;

e. automatically generating a new random number from the first random number;

f. automatically generating a new simulation result for the random distribution model;

20 g. automatically repeating steps e and f a number of times equal to the number of simulations inputted less two simulations;

h. automatically inputting the output of step g as the average yield for each of a plurality of funds;

i. automatically deducting a service charge; and

25 j. automatically calculating the average projected yield for each of the plurality of funds;

k. automatically generating a first simulation result for the random distribution model for a new simulation; and

l. automatically repeating steps e through j a number of times equal to the number of scenarios inputted less one scenario to produce outcomes for each of the plurality of scenarios.

5 21. The method of claim 16 wherein the projection method factors include a standard deviation, an average yield for the plurality of funds, and a probability that the average yield for the plurality of funds will exceed the projected yield in any year.

10 22. The method of claim 16 wherein the random distribution simulation includes a Monte Carlo simulation.

 23. The method of claim 18 wherein the plurality of funds includes at least one index fund.

15 24. A method for modeling a fixed retirement income amount for a user over a predetermined time period after a preselected delay period comprising the steps of:

- 20 a. inputting an issue commission of zero percent, a best estimate for treasury security yields, and a plurality of additional basis point spreads;
- b. automatically applying an annuity calculator to produce a current projected fixed retirement income amount; and
- c. automatically repeating steps a and b for a range of treasury security yields and for each of the plurality of additional basis point spreads.

25 25. The method of claim 24 wherein the annuity calculator includes the Flexibility Annuity Settlement Proposal Generating System.

 26. The method of claim 24 further comprising the steps of:

- 59 -

paying the user the fixed income retirement amount at the end of the preselected delay period on a periodic basis;

at the end of the predetermined period and on a periodic basis thereafter for the predetermined time period, comparing the fixed income retirement amount paid to an amount payable using an annuity; and

if the fixed income retirement amount paid is less than the amount payable using the annuity, paying the difference to the user.

27. A method for pricing fund charges for an investment fund equal to at least a preselected guaranteed accumulation investment amount over a predetermined time period selected by a user comprising the steps of:

creating a plurality of information sets corresponding to a plurality of potential users;

automatically projecting a plurality of monthly charges for producing a plurality of projected guaranteed accumulation investment amounts for each of the plurality of information sets;

automatically deducting and accumulating the plurality of monthly charges; for each of the plurality of projected guaranteed accumulation investment amounts, automatically adding the accumulated monthly charge and subtracting the projected guaranteed accumulation investment amount to produce a probability distribution providing a range of net values; and

selecting one from the plurality of monthly charges that produces zero value for the probability and distribution produced.

28. The method of claim 27 wherein the plurality of information sets includes extensive variation of duration of benefits, contribution patterns, and select end choices.

29. The method of claim 27 wherein the plurality of information sets comprises a single life with a ten year certain settlement option.

30. A method for processing a selected guaranteed accumulation investment amount for a user over a predetermined time period equal to at least a preselected guaranteed accumulated investment amount selected by the user comprising the steps of:

inputting a plurality of funds each of the plurality of funds having a value;
automatically generating a fund guarantee statement;
automatically generating a probability distribution of projected accumulation amounts;
automatically deducting a charge on a periodic basis; and
automatically generating an electronic fund report.

31. The method of claim 30 further comprising the steps of:
automatically determining whether any fund of the plurality of funds is unavailable;
if any fund of the plurality of funds is unavailable, automatically determining the date the unavailable fund became unavailable; and
automatically determining the value of the unavailable fund on the date the fund became unavailable.

32. A method for combining electronic fund reports for a client for a plurality of funds and a plurality of transactions for the plurality of funds wherein each of the plurality of funds has an amount, comprising the steps of:
automatically determining whether all of the plurality of funds have reported;
automatically matching the plurality of transactions to the plurality of funds;
determining whether diversification guidelines are met for the plurality of funds and plurality of transactions;
automatically generating withdrawal and deposit instructions for the plurality of funds; and

automatically determining whether the total contributions exceed a predetermined amount.

5 33. The method of claim 32 wherein the step of determining whether diversification guidelines are met for the plurality of funds and plurality of transactions further includes the steps of:

 if the plurality of funds and plurality of transactions does not meet the diversification guidelines, providing to the client a timetable to reallocate the plurality of funds; and

10 determining whether diversification guidelines are met for the reallocated plurality of funds.

 34. The method of claim 32 wherein the step of automatically determining whether the total contributions exceed a predetermined amount further includes the steps of:

 if the total contributions exceed a predetermined amount, automatically generating a report to the client requesting the excess of contributions over the predetermined amount be withdrawn;

20 automatically generating a timetable for the client to withdraw the excess of contributions over the predetermined amount;

 if the timetable is not met, automatically identifying a fund from the plurality of funds containing the largest amount;

 automatically opening a second account with the fund from the plurality of funds containing the largest amount; and

25 automatically transferring the excess of contributions over the predetermined amount from the fund from the plurality of funds containing the largest amount to the second account.

35. A method for processing for a user a guaranteed accumulation investment amount for a plurality of variable annuities with a fixed retirement income guaranteed amount having a maturation date comprising the steps of:

- inputting user specific data;
- 5 automatically generating a proposal for a guaranteed minimum benefit rider;
- automatically generating a contract data page;
- automatically issuing a contract with a guaranteed minimum income benefit rider;
- 10 automatically deducting a daily cost charge;
- receiving transactions for the account;
- comparing a variable annuity diversification guideline to the received transactions for the account;
- automatically generating withdrawal and deposit instructions for the
- 15 received transactions;
- automatically determining whether the total contributions exceed a predetermined amount;
- automatically determining the guaranteed accumulation investment amount;
- and
- 20 automatically periodically transmitting information about the account to the user.

36. The method of claim 35 wherein the transactions include transferring account amounts for removed funds.

25

37. The method of claim 35 wherein the step of automatically determining whether the total contributions exceed a predetermined amount further includes the steps of:

- 63 -

if the total contributions exceed a predetermined amount, automatically generating a report to the client requesting the excess of contributions over the predetermined amount be withdrawn;

5 automatically generating a timetable for the client to withdraw the excess of contributions over the predetermined amount;

if the timetable is not met, automatically identifying a fund from the plurality of funds containing the largest amount;

automatically opening a second account with the fund from the plurality of funds containing the largest amount; and

10 automatically transferring the excess of contributions over the predetermined amount from the fund from the plurality of funds containing the largest amount to the second account.

38. The method of claim 35 further comprising the step of automatically transmitting to the user notice of the maturation date prior to the maturation date.

39. The method of claim 35 further comprising the steps of:
automatically comparing the guaranteed accumulation investment amount to the total value of the plurality of variable annuities; and
20 upon the maturation date, the user receiving the excess of the guaranteed accumulation investment amount over the total value of the plurality of variable annuities.

40. The method of claim 35 further comprising the step of:
25 upon the maturation date, the user selecting a new maturation date.

41. The method of claim 26 further comprising the steps of:
generating for the user a guaranteed minimum benefit rider;
the user electing a benefit with a benefit period and an assumed interest
30 rate;

automatically providing a resulting guaranteed periodic benefit and periodic charge for guarantee;

for the benefit period, automatically comparing an actual benefit from the benefit to a calculated benefit using the assumed interest rate; and

5 at the end of the benefit period and at periodic intervals thereafter, automatically comparing the actual benefit from the benefit to a calculated benefit using the assumed interest rate.

10 42. The method of claim 41 further comprising the step of if the actual benefit from the benefit is less than a preselected percentage of the calculated benefit using the assumed interest rate, automatically paying the difference between the actual benefit from the benefit and the calculated benefit using the assumed interest rate.

15 43. The method of claim 41 further comprising the step of automatically transmitting the results of the comparing step to the user.

20 44. A method for determining a reserve for an investment fund mix producing a guaranteed accumulation investment amount for a plurality of users over a predetermined time period, wherein the investment fund mix includes a plurality of selected funds, each of the plurality of selected funds having a value, comprising the steps of:

25 automatically identifying for each of the plurality of users each of the plurality of selected funds for which the value of the selected fund is less than the guaranteed accumulation investment amount;

automatically summing the difference between each of the plurality of selected funds for which the value of the selected fund is less than the guaranteed accumulation investment amount for each of the plurality of users to produce a total difference; and

30 automatically increasing the total difference by a reserve factor.